

Talk/Poster (none for Ultracold):

Hubble/WFC3 Spectroscopy of the Transiting Exoplanets WASP-19b and WASP-17b

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Measurements of transiting exoplanets that target extremes in parameter space offer the best chance to disentangle the structure and composition of the atmospheres of hot Jupiters. WASP-19b is one of the hottest exoplanets discovered to date, while WASP-17b has a much lower equilibrium temperature but has one of the largest atmospheric radii of known transiting planets. We discuss results from HST/WFC3 grism 1.1-1.7 micron spectroscopy of these planets during transit. We compare our integrated-light transit depths to previous IR transit photometry, and derive the 1.4-micron water absorption spectrum. We discuss implications for the atmospheric composition and structure of these hot Jupiters, and outline future observations that will further expand on these results.